

ABSTRACT OF THE DISCLOSURE

Disclosed is a transmitting apparatus for cross connecting and transmitting main signals which enter via ring-configured transmission lines to which working and protection channels have been assigned in first and second directions, and rescuing a main signal by looping back the main signal in the opposite direction using the protection channel when a transmission line fails. Non-rescue information storage means stores non-rescue information which indicates whether each channel that is the object of rescue by loop-back is a non-rescue channel. An unrescuable failure discrimination unit determines whether a failure for which rescue is impossible has occurred in each channel, which is the object of rescue, other than a non-rescue channel. On the basis of main-signal cross-connect information, discrimination-result insertion means interchanges a result of discrimination of each channel and inserts the interchanged result of discrimination in the main signal of the corresponding channel after cross connect.